

Community engagement efforts for recruitment in a study of adult women with urinary incontinence at risk for falls: the MoVEonUP Study

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Ethical Approval
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Hypothesis / Aims of Study
This study is the first to evaluate the effectiveness of community-engaged strategies for recruiting older women into a clinical trial on fall and urinary incontinence (UI) prevention. Women from racial and ethnic minority groups are at elevated risk for UI and remain underrepresented in clinical research [1]. Ensuring effective recruitment approaches is critical to achieving adequate representation in trials of conservative UI treatments [2]. *The Mobility and Voiding Exercises in Older Women with Urinary Incontinence (MoVEonUP)* study is a single-site, randomized controlled trial designed to test the short- and long-term efficacy of a home-based, multicomponent intervention to reduce UI and falls among community-dwelling women aged ≥70 years (**TABLE 1**) [3]. A key study objective is to recruit a diverse cohort representative of the broader target population. This analysis compares the effectiveness of two community-based recruitment methods—clinician-led bladder health education sessions and outreach at community health fairs—in enrolling participants into the MoVEonUP trial.

Study Design, Materials and Methods
Recruitment was conducted through the Penn Bladder Health Network (PBHN), a partnership between a university research team and community organizations in a large urban city where 55% of women are racial/ethnic minorities.

Strategies included 30-minute educational sessions (“*Bladder Fitness after 60*”) at senior centers, residential complexes, religious organizations, and health fairs, led by continence specialists.

Educational materials on urinary incontinence were distributed, and interested women were invited to MoVEonUP pre-screening. Recruitment yield was defined as the proportion of interested women to adults reached, with site comparisons analyzed using non-parametric tests..

Results Summary

- Recruitment Timeline: Began in June 2022 and concluded in August 2025.
- Activities:
 - 51 educational presentations
 - Attendance at 23 health fairs (see **TABLE 2**)
- Interest and Enrollment:
 - 351 individuals expressed interest
 - 55 participants consented to enroll (16% enrollment rate)
- Demographics:
 - 69% of enrolled participants were from racial minority groups
 - The largest group represented was Black women (see **TABLE 3**)
- Recruitment Effectiveness:
 - Higher yield from educational presentations compared to health fairs (p < 0.01)
 - Significantly higher recruitment rates at:
 - Senior housing complexes
 - Religious organizations
 - Compared to:
 - Senior and community centers (p < 0.01)

Interpretation of Results

Approximately one in five women reached through community outreach expressed interest in participating in the MoVEonUP trial. Additional referrals from community members suggest an even broader impact. These findings demonstrate that community-engaged strategies are effective for recruiting a diverse cohort of older women—an often underrepresented group in urinary incontinence trials—and may help engage individuals who do not typically seek formal care.

MoVEonUP Study

Concluding Message

Community-engaged recruitment strategies, particularly educational sessions at senior housing complexes and religious organizations, were effective in enrolling a diverse population of older women. This approach provides practical guidance for future intervention studies on urinary incontinence and fall prevention and may serve as a model to enhance representation of underserved populations in clinical research.

TABLE 1. MoVEonUP multicomponent intervention		
Conceptual model component addressed	Component of MoveOnUp	Component Details
Physical Abilities	General balance and strength training via the FlexToBa Exercise Program	<ul style="list-style-type: none">• FlexToBa exercise program delivered via a DVD or flash drive or via access to a password-protected internet site.• Program includes six separate exercise sessions, each of which is intended to be used for four weeks.• Program includes aerobic warm up, stretches, strengthening exercises, balance exercise, flexibility.• Participants given necessary exercise equipment consisting of resistance bands, a set of 2-pound weights, and a yoga mat.• Exercise prescription: exercise 3 times a week on non-consecutive days.
Mental abilities and social expectations	Behavioral bladder training and urge suppression techniques administered using written, video and audio materials.	<ul style="list-style-type: none">• The MoveOnUp Bladder Retraining Brochure• Bladder training video delivered via a DVD or flash drive or via access to a password protected internet site• Audio Exercise Session (Controlling Bladder Urgency, Frequency and Incontinence) that participant can download (https://www.awakenpelvichealth.com/resources/) onto a mobile device (smartphone, computer tablet)• Pelvic muscle exercise prescription: perform pelvic muscle exercises 2/day for 3 times/week on non-consecutive days.
Environmental barriers	Home hazard assessment by Occupational Therapist (OT)	<ul style="list-style-type: none">• OT performs home assessment at baseline• OT completes a checklist for falls prevention in older adults developed by the Center for Disease Control and Prevention.• OT provides written recommendations for a client-centered intervention plan that includes a mix of education, home modifications, and assistive technology.

TABLE 2. MoVEonUP Community Outreach Results				
Engagement Type & Location	Number of Classes/Fairs	Older adults reached	Potential MoVEonUP participants reached	Recruitment Yield (%)
Education Classes	51	938	207	22.1
Senior Centers	23	550	105	19.1
Community Centers	8	80	7	8.8
Senior Housing	17	247	76	30.8
Religious organizations (e.g. churches)	3	61	19	31.1
Community Health Fairs	23	880	144	16.4
TOTAL		1818	351	19.3

References

1. McKay, E. R., Davila, J. L., Lee, J. A., Rolston, R., Agaltiu, I., & Abraham, N. E. (2021). Representation of minority groups in key pelvic floor disorder trials. *Female Pelvic Medicine & Reconstructive Surgery*, 27(10), 602–608.
2. Wieland ML., Njeru JW., Alahdab F., Doubeni CA., Sia IG. Community-Engaged Approaches for Minority Recruitment Into Clinical Research: A Scoping Review of the Literature. *Mayo Clin Proc.* n March 2021;96(3):733-743.
3. Andy U.U., Newman D.K., Wyman J.F., Klusaritz H., Walsh W., Shou H., Koepler N., Schmitz K.H., Reaves S., Arya L., Brown R.T. The Mobility and Voiding Exercises in Older Women with Urinary Incontinence (MoVEonUp) randomized controlled trial: study protocol and rationale. *BMC Geriatr.* 2024, Dec 4;24(1):994.

TABLE 3. Demographic Characteristics of Study Participants Recruited at Community Presentations and Health Fairs (n=55)	
Characteristic	Number (%)
Race	
Asian	1 (2)
Black	36 (65)
Native American Indian	0 (0)
White	17 (31)
Other	1 (2)
Ethnicity	
Hispanic	2 (4)
Non-Hispanic	53 (96)
Education	
Less than high school	4 (7)
High school diploma/GED	17 (31)
Some college	10 (18)
Bachelor's degree	9 (16)
Post-baccalaureate	8 (15)
Graduate degree	7 (13)